

5.0 POST LAUNCH PAD DEBRIS INSPECTION

The post launch inspection of the MLP, Pad A FSS and RSS was conducted on 19 May 2000 from Launch + 2 to 4 hours. No flight hardware was found.

A stud hang-up was not expected on this launch. Boeing-HB reported an Orbiter liftoff lateral acceleration of 0.09 g's which is below the threshold (0.14g's) for stud hang-ups. Erosion was typical for the south posts. North holddown post blast covers and T-0 umbilicals exhibited typical exhaust plume damage. The blast cover for HDP #8 was modified with an ablative test coating material to protect the steel cover from SRB plume erosion. The material ablated as designed with no apparent damage to the metal cover. Both SRB aft skirt GN2 purge lines were intact, though the protective tape was almost entirely eroded away with minimal damage to the underlying braided shield.

The LO2 and LH2 Tail Service Masts (TSM) appeared undamaged and the bonnets were closed properly. The Orbiter Access Arm (OAA) seemed to be undamaged.

The MLP deck was in generally good shape with one missing bolt from a deck access panel on the southwest side. The panel is adjacent to the one previously noted on the L-20 hour inspection as not having peripheral RTV sealant applied.

The GH2 vent line latched in the eighth of eight teeth of the latching mechanism. The GUCP 7-inch QD sealing surface exhibited no damage. Pieces of the T-0 lock weight guide roller assemblies were found on the adjacent deck grating and pad surface.

The GOX vent arm, hood, ducts and structure appeared to be in good shape with no indications of plume damage. The vent seals were inspected for ET topcoat adherence. Several small spots of topcoat were observed on the +Y seal lower surface. No topcoat was observed on the -Y seal.

Debris findings on the FSS included loose or missing cable tray and conduit covers, and loose electrical cables and broken lighting fixtures, which are typically found. The 235-foot level FSS sign was loose and missing hardware.

No significant damage occurred in the flame trenches. No flight debris was found in the Pad acreage.

The FSS or PCR panel observed during Launch Day Video Review was not found during this inspection. Overall, damage to the pad appeared to be minimal.

An underground gas line, media unknown, was observed venting through the ground. This was observed emanating from the remote ECS tunnel adjacent to LOX cable tray on the west side of the PTCR. Pad leader was advised for immediate action.

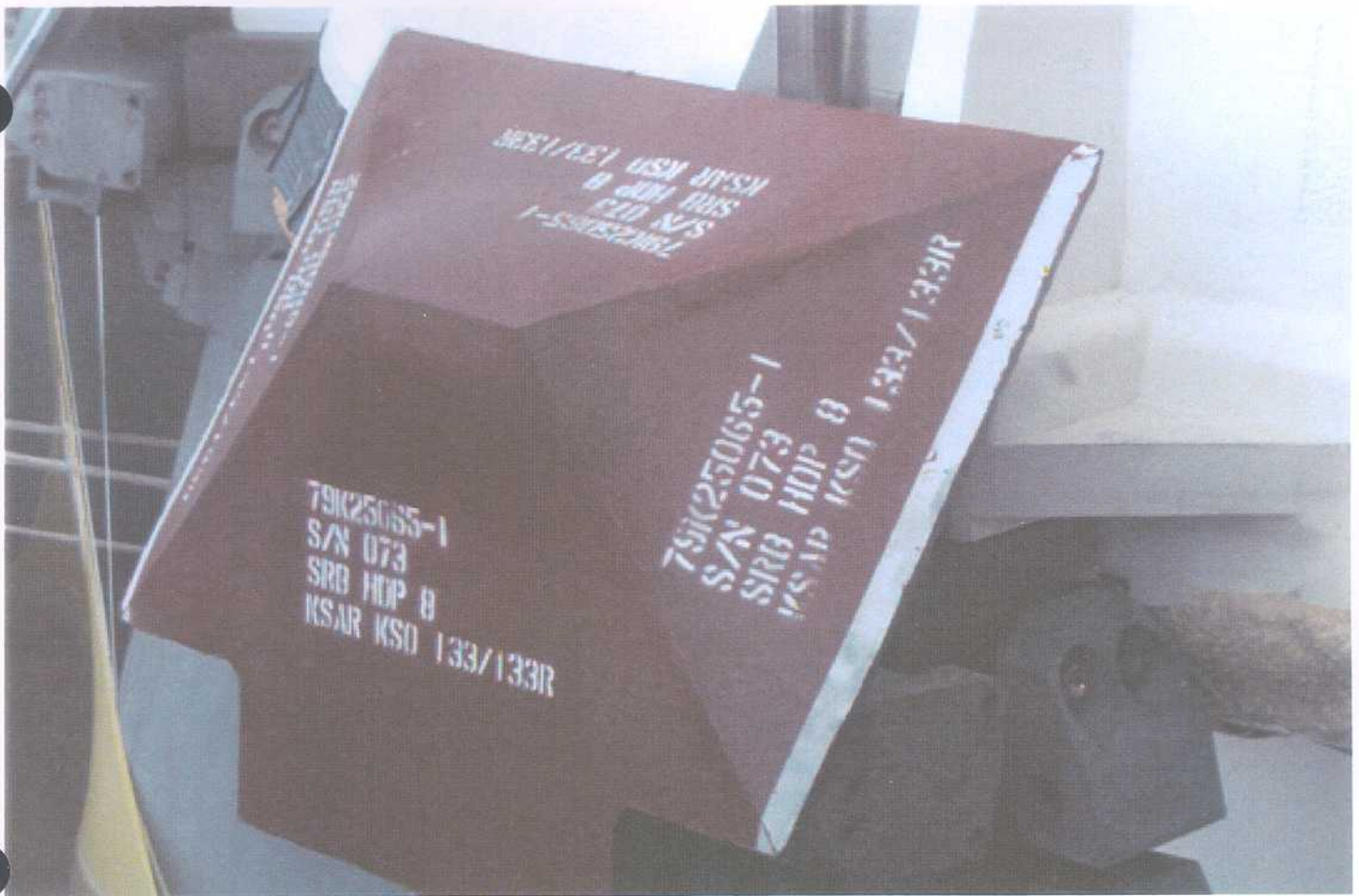


Photo 11: HDP #8 Blast Cover Coating

The blast cover for HDP #8 was modified with an ablative test coating material to protect the steel cover from SRB plume erosion. The material ablated as designed with no apparent damage to the steel cover.



Photo 12: Aft Skirt GN2 Purge Lines

Both SRB aft skirt GN2 purge lines were intact, though the protective tape was almost entirely eroded away with minimal damage to the underlying braided shield.